AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

(currently amended): An set of RNA sequences shown thereafter, or any
fragment from the sequences, whichthat demonstrates anti-HIV infection activity and be is
employed in prevention and treatment of AIDS, wherein said RNA is selected from the group
consisting of:

a single stranded RNA comprising SEQ ID NO:1, SEQ ID NO:2 or SEQ ID NO:3;

a single stranded RNA comprising a fragment of SEQ ID NO:1, SEQ ID NO:2 or SEQ ID NO:3;

a double stranded RNA derived by annealing of SEQ ID NO:1 and the complementary sequence thereof, SEQ ID NO:2 and the complementary sequence thereof, or SEQ ID NO:3 and the complementary sequence thereof; and

a double stranded RNA derived by annealing of a fragment of SEQ ID NO:1 and the complementary sequence thereof, a fragment of SEQ ID NO:2 and the complementary sequence thereof, or a fragment of SEQ ID NO:3 and the complementary sequence thereof. The nucleotides include single strand RNA, any fragment derived from the sequences, or double strand RNA derived by annealing of the sequences with its complements sequences.

aucaaugaggaageugcagaaugg (SEQ ID NO:1);

RESPONSE TO RESTRICTION REQUIREMENT AND SUPPLEMENTAL PRELIMINARY AMENDMENT U.S. Appln. No.: 10/539,446

- (2) gggaagugacauagcaggaacuacuag (SEQ ID NO:2);
- (3) uaaauaaaauaguaagaauguauageeeu (SEQ ID NO:3);

wherein said fragment of SEQ ID NO:1, SEQ ID NO:2 or SEQ ID NO:3 is selected from

the group consisting of

- a 19 nt fragment of SEQ ID NO:1, SEQ ID NO:2 or SEQ ID NO:3;
- a 20 nt fragment of SEQ ID NO:1, SEQ ID NO:2 or SEQ ID NO:3;
- a 21 nt fragment of SEQ ID NO:1, SEQ ID NO:2 or SEQ ID NO:3;
- a 22 nt fragment of SEQ ID NO:1, SEQ ID NO:2 or SEQ ID NO:3;
- a 23 nt fragment of SEQ ID NO:1, SEQ ID NO:2 or SEQ ID NO:3;
- a 24 nt fragment of SEQ ID NO:2 or SEQ ID NO:3;
- a 25 nt fragment of SEQ ID NO:2 or SEQ ID NO:3;
- a 26 nt fragment of SEQ ID NO:2 or SEQ ID NO:3;
- a 27 nt fragment of SEQ ID NO:3;
- a 28 nt fragment of SEQ ID NO:3;

wherein said 19 nt fragment of SEQ ID NO:1 is selected from the group consisting of ucaaugaggaagcugcaga, caaugaggaagcugcagaa, aaugaggaagcugcagaau, augaggaagcugcagaaug and ugaggaagcugcagaaugg; and

RESPONSE TO RESTRICTION REQUIREMENT AND SUPPLEMENTAL PRELIMINARY AMENDMENT U.S. Appln. No.: 10/539,446

wherein said 19 nt fragment of SEQ ID NO:2 is selected from the group consisting of ggaagugacauagcaggaa, gaagugacauagcaggaacu, agugacauagcaggaacua, gugacauagcaggaacua, gugacauagcaggaacuacu, gacauagcaggaacuacua and acauagcaggaacuacuag.

(4) uaugggguaccugugugga (SEQ ID NO:4);

(5) geeaauueceauacauuauuguge (SEQ ID NO:5);

(6) uuaaauggcagucuagcagaa (SEQ ID NO:6);

(7) accacacacaaggcuacuucecugau (SEQ ID NO:7);

(8) acagcegceuageauuucaucae (SEQ ID NO:8);

(9) ggauggugcuucaagcuaguaceaguu. (SEQ ID NO:9)

- (currently amended): The RNA sequences in accordance withof claim 1, wherein
 said RNA is -or their fragments were modified at their its 5' end or 3' end by adding two uracil
 nucleotides; which showed anti-HIV activity or be employed in HIV prevention and treatment.
- (currently amended): A set of <u>The</u> RNA sequences which showed anti-HIV
 activity or be employed in AIDS prevention and treatment of claim 1, wherein said RNA is a
 Hairpin RNA consisting of a stem part and a loop part,

wherein said stem part is a double stranded RNA as claimed in claim 1, which is derived by annealing of

SEQ ID NO:1 and the complementary sequence thereof,

SEQ ID NO:2 and the complementary sequence thereof,

SEQ ID NO:3 and the complementary sequence thereof,

the fragment of SEQ ID NO:1 and the complementary sequence thereof,

the fragment of SEQ ID NO:2 and the complementary sequence thereof,

or the fragment of SEQ ID NO:3 and the complementary sequence thereof,

and wherein said loop is a non-complementary spacer, which were characterized by:

Hairpin RNA composed of RNA as declared in claim 1 and it complement sequence spaced by a non-related spacer.

- (currently amended): A set of single-stranded DNA or double-stranded DNA that demonstrates sequences which showed anti-HIV infection activity and isor be employed in AIDS prevention and treatment of AIDS, wherein, which were characterized by:
- 1) said single-stranded DNA or one strand of said double-stranded DNA corresponds to the RNA of claim 1, or its complementary sequence; or

 said single-stranded DNA or one strand of said double-stranded DNA corresponds to the RNA of claim 2. or its complementary sequence; or

- 3) said single-stranded DNA or one strand of said double-stranded DNA corresponds to the RNA in accordance with claim 3 or its complementary sequence1) DNA sequences or their fragments, which corresponded to the RNA sequences or their fragments as declared in Claim 1 or corresponded to the double strand RNA in accordance with claim 1 and its complement sequence or fragments; or
- 2) DNA sequences or their fragments corresponded to RNA sequences or their fragments as declared in claim 1, which were modified by other nucleotides at their 5', 3', or both. Or,
- A single-strand or double-strand DNA sequence, which correspond to the RNA sequence as described in Claim 3.
- 5. (currently amended): An expression vector that demonstrates anti-HIV against HIV-infection activity and is or be employed in treatment or prevention and treatment of AIDS, wherein said vector which characterized by: Vectors contains any of the RNA of claims 1-3 or the DNA of claim 4 or DNA sequences or their fragment described Claim 1 to 4. The term Vector includes RNA vectors and DNA vectors.

RESPONSE TO RESTRICTION REQUIREMENT AND SUPPLEMENTAL PRELIMINARY AMENDMENT

U.S. Appln. No.: 10/539,446

- 6. (currently amended): One-kind-ofA liposome that demonstrates anti-HIV against HIV-infection activity and isor-be employed in treatment or prevention and treatment of AIDS, wherein said liposome coats any of the RNA of claims 1-3, or the DNA of claim 4-which characterized by: DNA, RNA or their fragments as in claim 1 to 4, or Vectors as described in Claim 5, were coated in the liposome.
- 7. (currently amended): A protocol against HIV infection or be employed inmethod for the prevention or treatment of HIV infection or the prevention or treatment of AIDS, wherein which characterized by: RNA, DNA or their fragments thereof according to any of as described in-Claims 1 to 4, or expression vectors as described in claim 5, or liposomes as described in claim 6, was are introduced into a cukaryotic cell line, animal cells or human body.
 - (canceled).
- (new): A liposome that demonstrates anti-HIV infection activity and is employed in prevention and treatment of AIDS, wherein said liposome coats the vector of Claim 5.

- 10. (new): A method for the prevention or treatment of HIV infection or the prevention or treatment of AIDS, wherein expression vectors according to claim 5 are introduced into a eukaryotic cell line.
- 11. (new): A method for the prevention or treatment of HIV infection or the prevention or treatment of AIDS, wherein liposomes according to claim 6 are introduced into a eukaryotic cell line.
- 12. (new): A method for the prevention or treatment of HIV infection or the prevention or treatment of AIDS, wherein liposomes according to claim 9 are introduced into a eukarvotic cell line.